

ABSTRACT

A trigger engine and infrastructure for event registration and handling that is reliable, secure and scalable.

Transactional authenticated and/or encrypted messages (e.g.,

5 via MSMQ) are used to transport events across each server. A stable recovery mechanism is provided wherein the recovery path is nearly identical to the normal path. A trigger engine may concentrate multiple similar requests into a single base request for event notification, and upon receipt of the base
10 event, access tables maintained in the trigger engine to track which client registered for which type of notification. In this manner, only the base event request is registered remotely, reducing the number of events that need to be communicated to remote servers. Identical event requests from
15 clients may also be concentrated into a base event request, and events distributed to those clients when appropriate. Duplicate base event requests are blocked locally and thus only the first such one ever reaches the remote server. The trigger engines are capable of combining events in a complex manner,
20 such as to notify a client only when a combination of time events, job events and/or other events have occurred, thus being suitable for use in a batch system.